Hard Drive Failure - Back Up - Recovery

To view each slide scroll down with the mouse wheel

The dreaded blue screen
You cant get any futher

How good is your backup – are you happy to loose some important files or photos

Some Applications don't need a backup as it is part of the service and backup is managed on the internet (cloud):
    Gmail
    Google Doc's

Some provide a hybrid service with large cloud storage for backup:
    Microsoft Office 365 comes with 1000 GB of storage

For the rest of us we may have to buy cloud storage or connect external storage via the USB port.

We will look at a few backup Options

Windows 10 File History

Windows 7   Disk Image
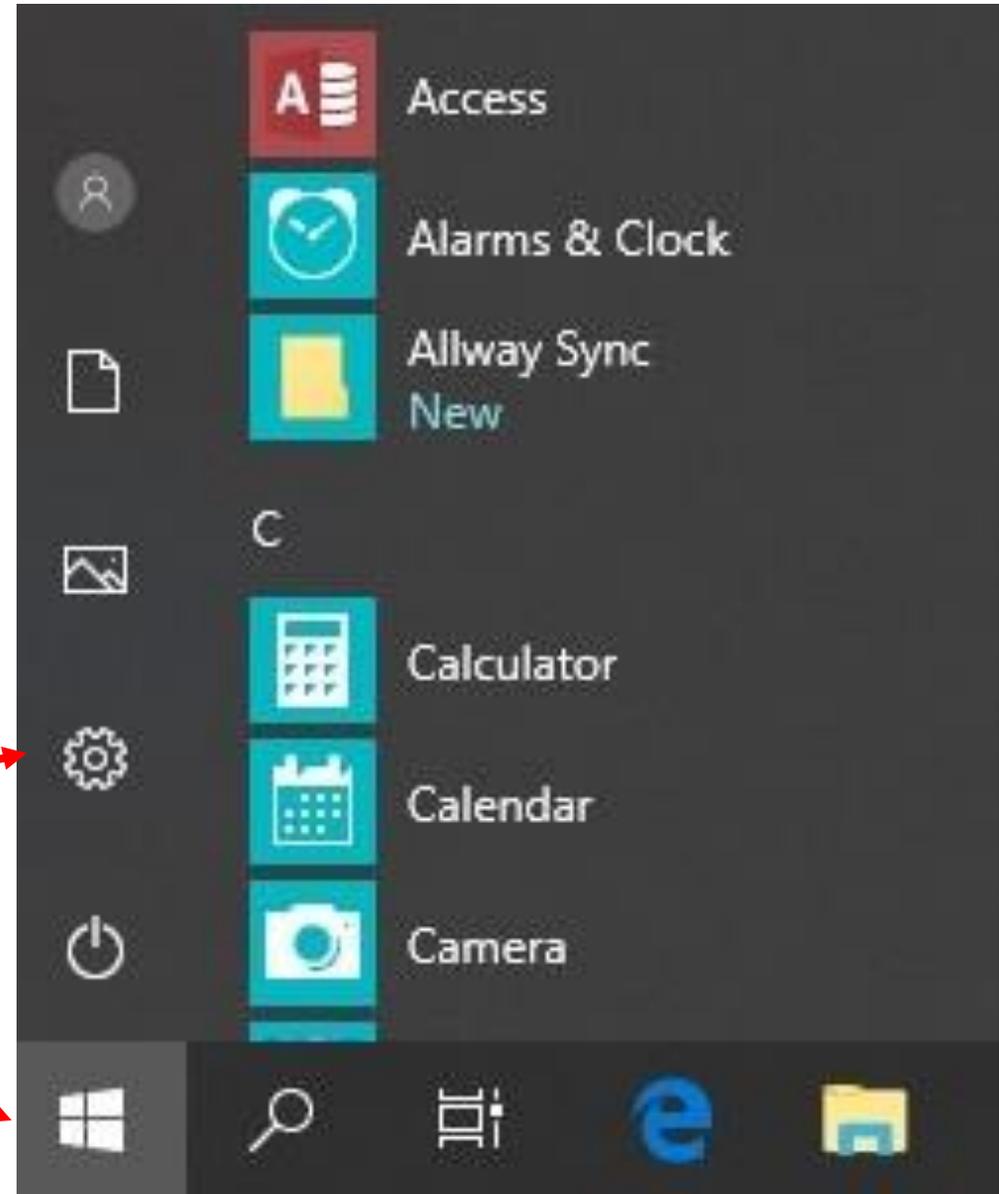
Allway Sync - free download from Allway Sync

Macrium – free download from Macrium

Picasa for Photo and Video in the Picasa APP

First find out how much storage you are using

To find how large your Hard Drive is and how much is used, go to
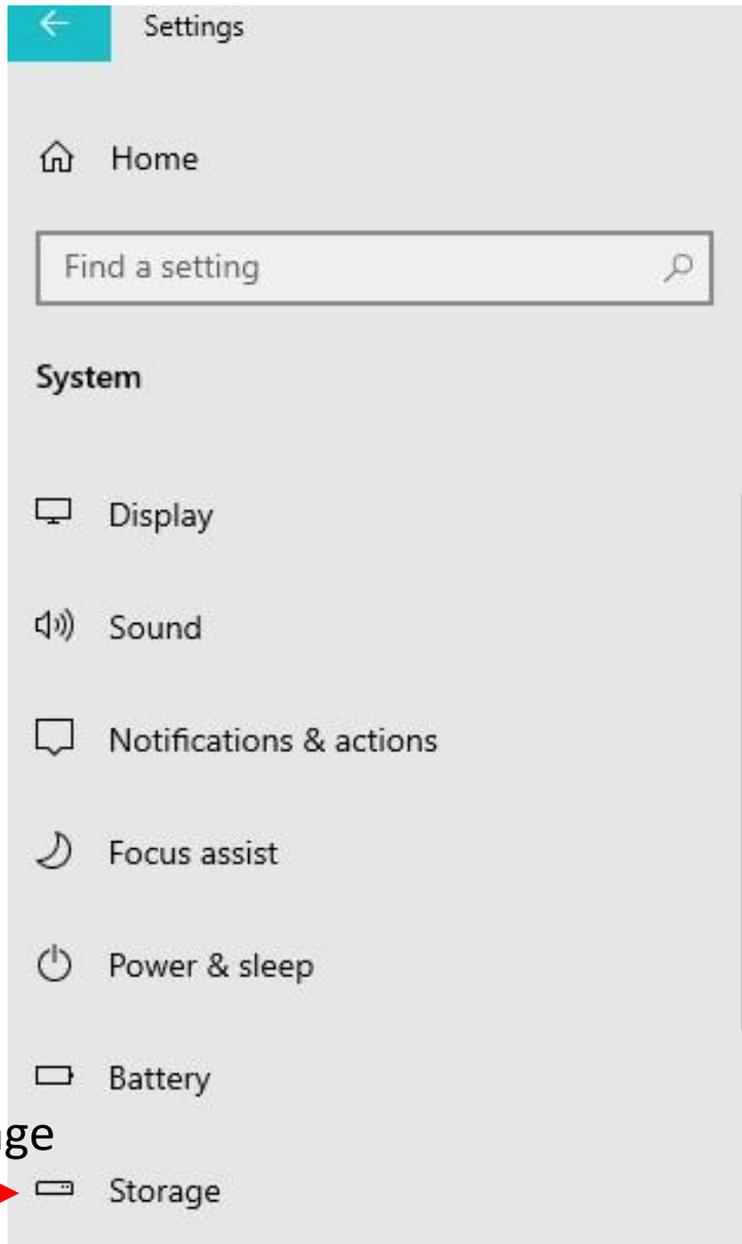
1) Windows Button

2) then Settings

Find a s

Click to open System Settings

⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯➤

System
Display, sound, notifications, power

Network & Internet
Wi-Fi, airplane mode, VPN

Accounts
Your accounts, email, sync, work, family

Settings

⌂ Home

Find a setting   🔍

System

🖵 Display

🔊 Sound

💬 Notifications & actions

🌙 Focus assist

⏻ Power & sleep

🖳 Battery

Click to open Storage ➡ 🖳 Storage

Storage

This is you hard drive (C) size

Local storage

This PC (C:) - 465 GB

94.1 GB used   371 GB free

This is the amount you are using

Storage sense

Windows can automatically free up space by getting rid of files you don't need, like temporary files and content in your recycle bin
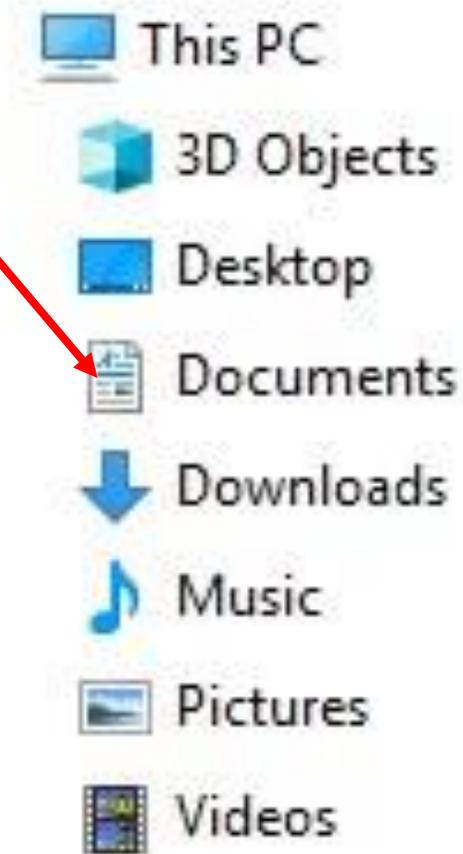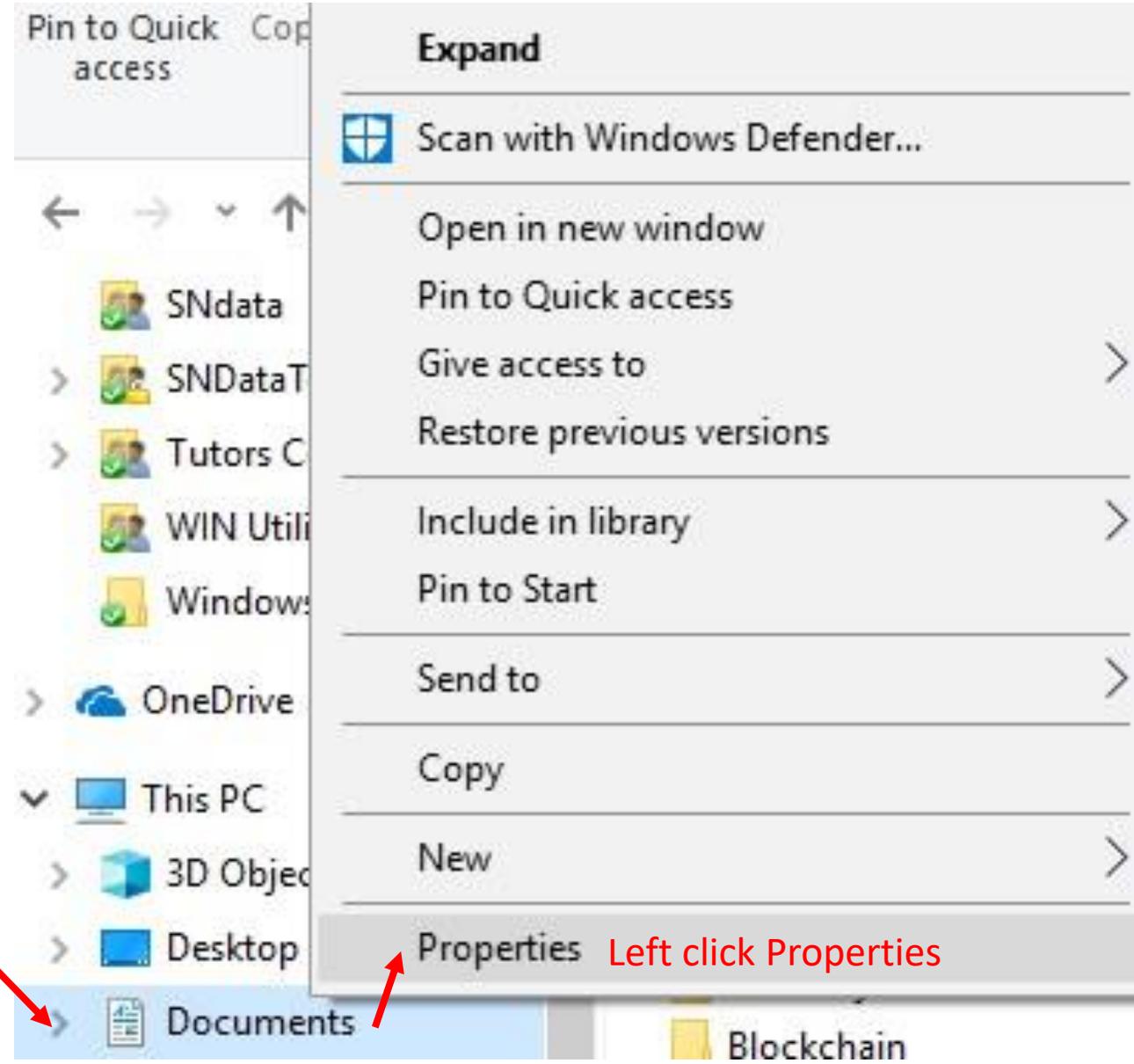
⚫◯ Off

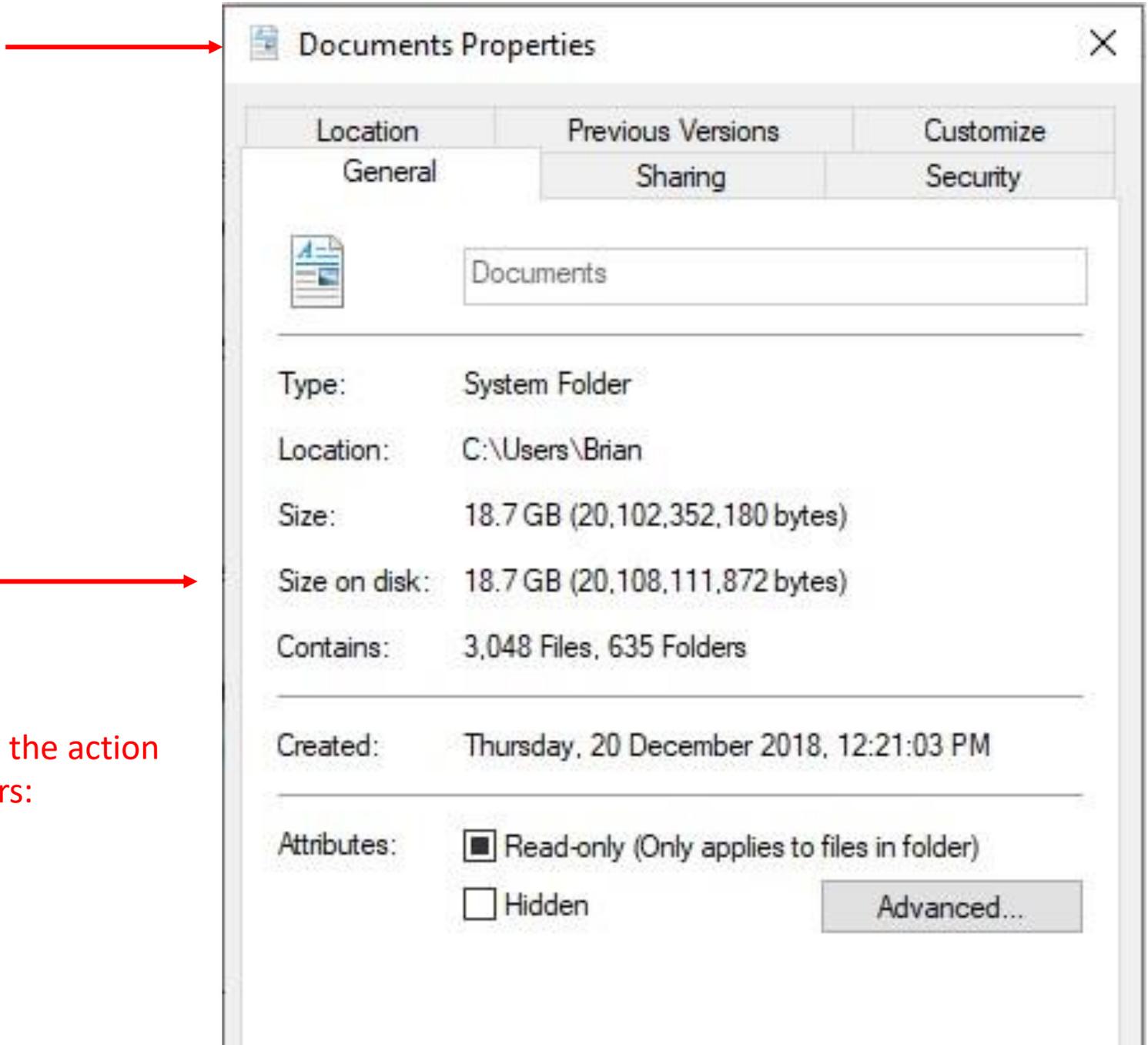Change how we free up space automatically

Free up space now

More storage settings

Documents Properties

Location	Previous Versions	Customize
General	Sharing	Security

Documents

Type:	System Folder
Location:	C:\Users\Brian
Size:	18.7 GB (20,102,352,180 bytes)
Size on disk:	18.7 GB (20,108,111,872 bytes)
Contains:	3,048 Files, 635 Folders
Created:	Thursday, 20 December 2018, 12:21:03 PM

Attributes: ☑ Read-only (Only applies to files in folder)
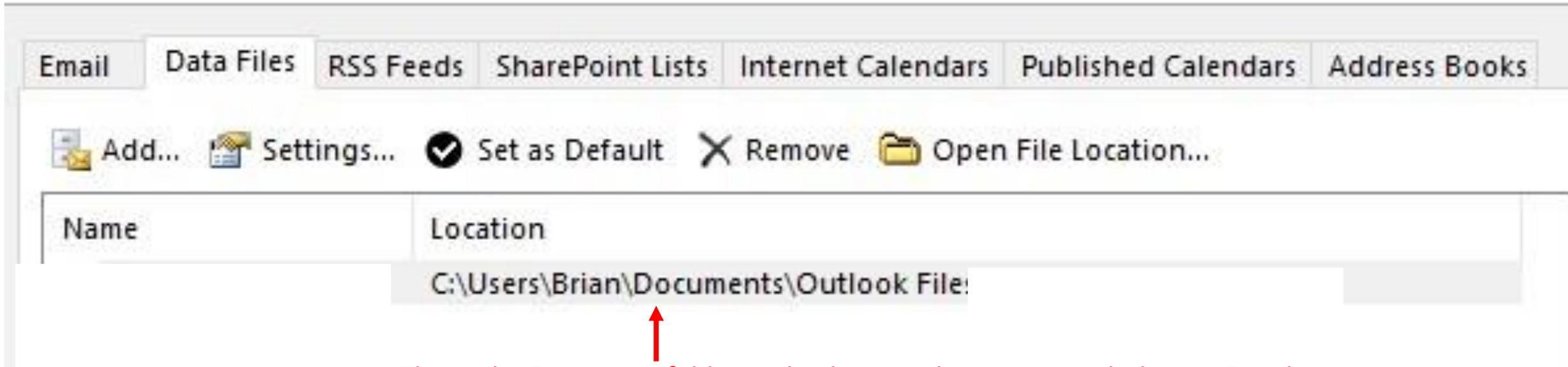   ☐ Hidden   Advanced...

You can repeat the action for other folders:
Photos
Music
Video

Account Settings **If you want to back up Emails and Contacts**

Data Files   In Office Outlook 2019 go to File – Info –Account Settings-Data Files to find the Email storage location

Outlook Data is saved as a two large .PST files in my example in the Document Folder
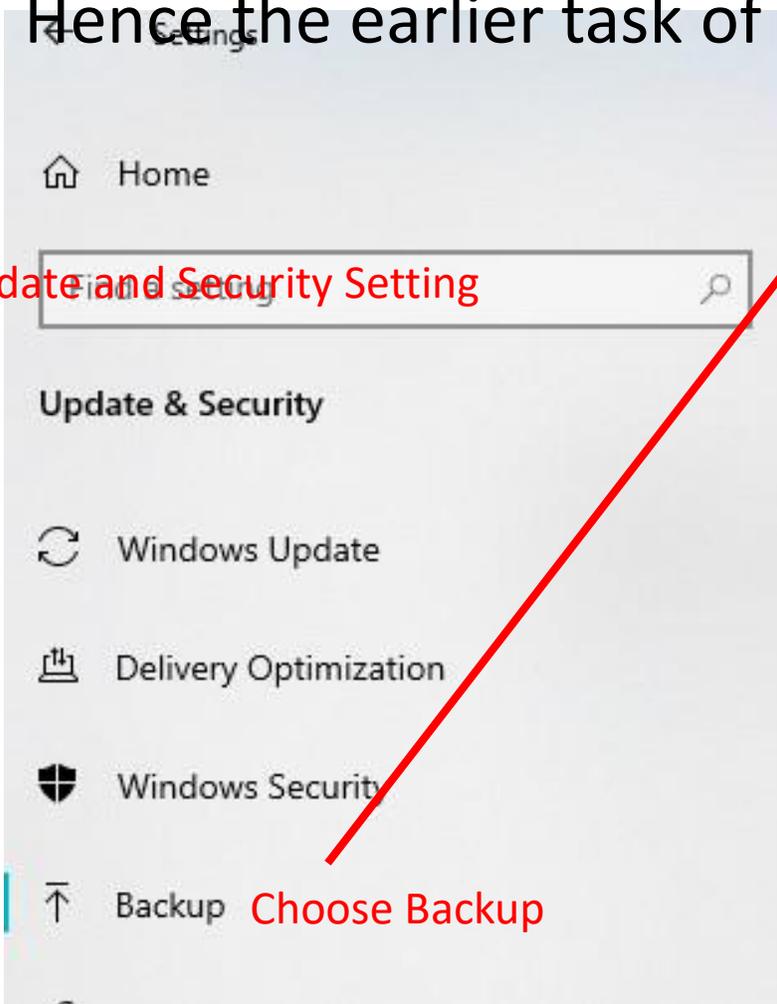
| Email | Data Files | RSS Feeds | SharePoint Lists | Internet Calendars | Published Calendars | Address Books |

Add...   Settings...   Set as Default   Remove   Open File Location...

Name	Location
	C:\Users\Brian\Documents\Outlook File:

This is the Document folder, so backing up documents includes my Emails

Win 10 Mail APP   email messages are stored locally on a mail folder in the **hidden AppData folder**. Email messages are stored as **.EML files**

Windows 10 has a built in backup using "File History"
You need an external USB connected Drive with sufficient capacity
Hence the earlier task of looking for Folder size.

Home

Go To Update and Security Setting

Update & Security

Windows Update

Delivery Optimization

Windows Security

Backup   Choose Backup

Backup

Back up using File History

Back up your files to another drive and restore them if the originals are lost, damaged, or deleted.

Automatically back up my files

⬤ On   Turn Off until you have connected the external drive and looked at the options on the next slide

More options

Looking for an older backup?

If you created a backup using the Windows 7 Backup and Restore tool, it'll still work in Windows 10.
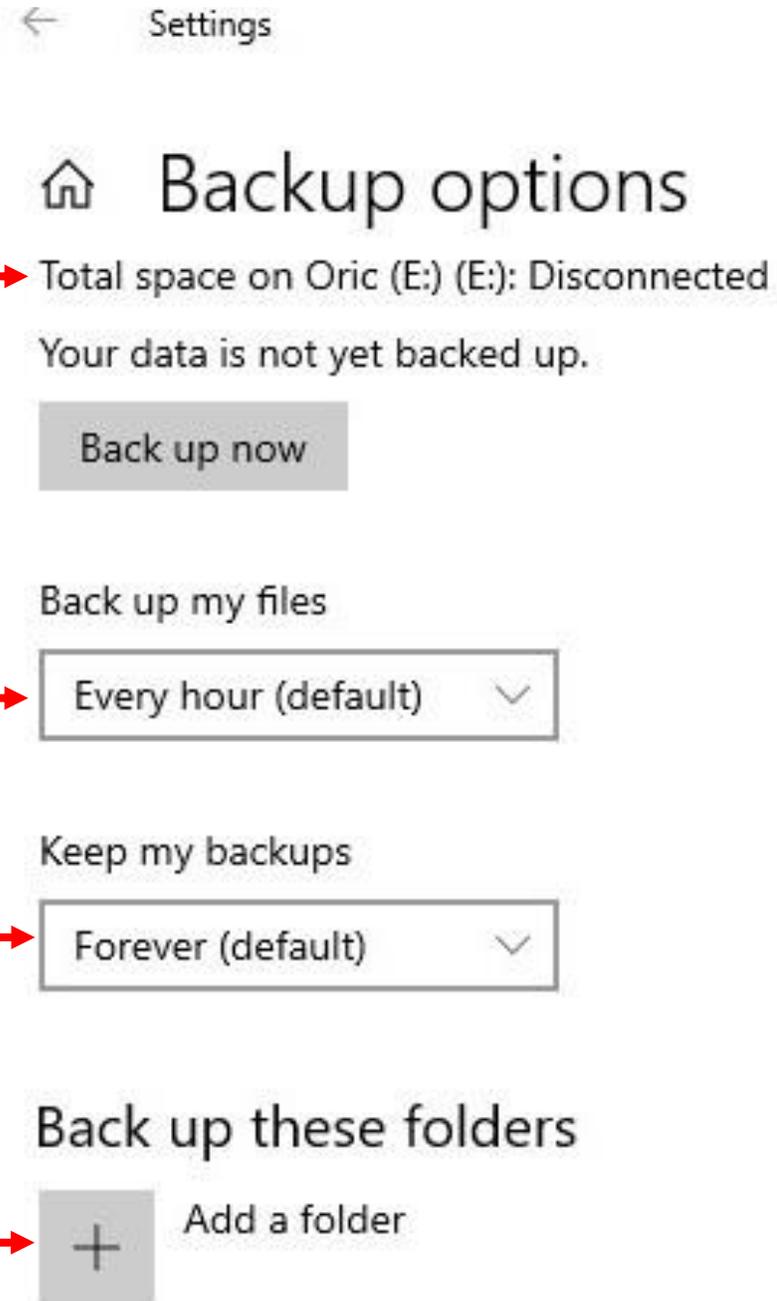
Go to Backup and Restore (Windows 7)

File History requires a large external drive usually connected via the USB port.

Connect your external drive
But "cloud storage" Is not supported

Each file you are working on is backed up hourly (can be set from 10 minutes to daily)

Each backup creates a new version of the file and you can limit how long it is retained

Email PST files are a problem for File History as they can be large and could well Fill up the external storage

← Settings

⌂ Backup options

Total space on Oric (E:) (E:): Disconnected

Your data is not yet backed up.

Back up now

Back up my files

Every hour (default) ⌄

Keep my backups

Forever (default) ⌄

Back up these folders

+ Add a folder

⌂ Backup options

Forever (default)

Back up these folders

The folders below are included
You can add any other folder of choice

＋ Add a folder

Downloads
C:\Users\Brian

Contacts
C:\Users\Brian

Dropbox
C:\Users\Brian

Pictures
C:\Users\Brian
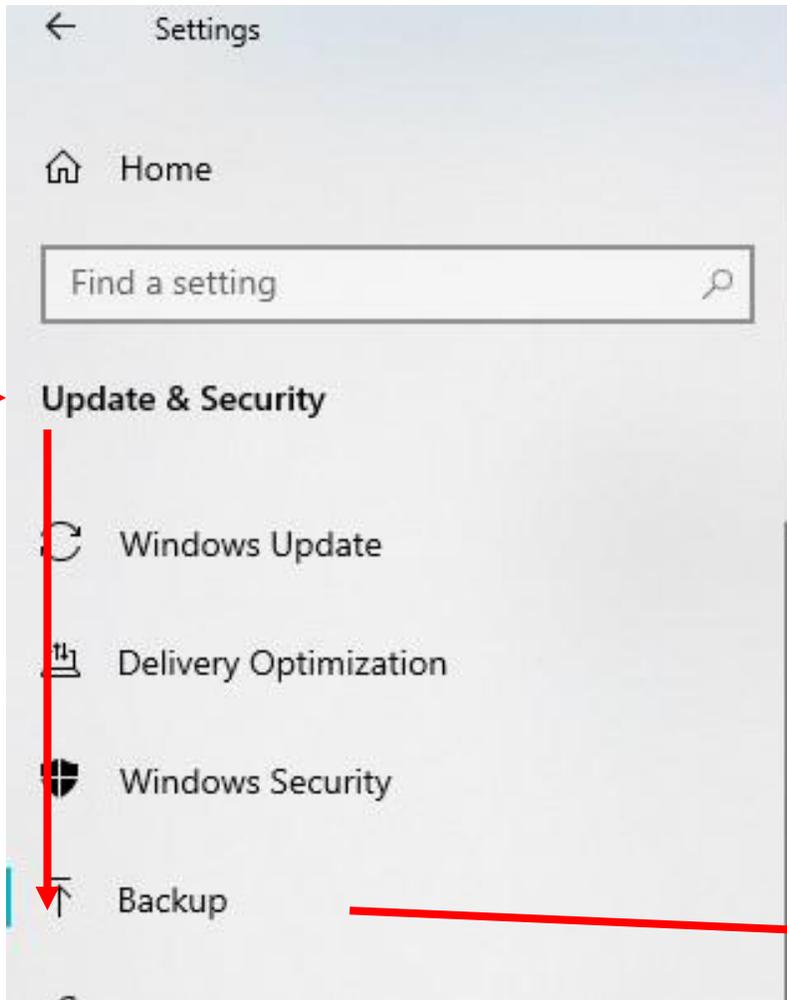
Exclude these folders

＋ Add a folder

Select any folders you don't want backed up

Now go back two steps and turn on Automatic backup and its underway
If you want manual control go back one step and choose Backup Now

File History only backs up data
For at complete whole disk backup you need an Image using this Windows 7 feature

Total Disk Image for everything

Click this option

Backup and Restore (Windows 7)

← → ∨ ↑ 🖳 › Control Panel › All Control Panel Items › Backup and Restore (Windows 7)

Control Panel Home

🛡 Create a system image

🛡 Create a system repair disc

Back up or restore your files

Backup

Windows Backup has not been set up.

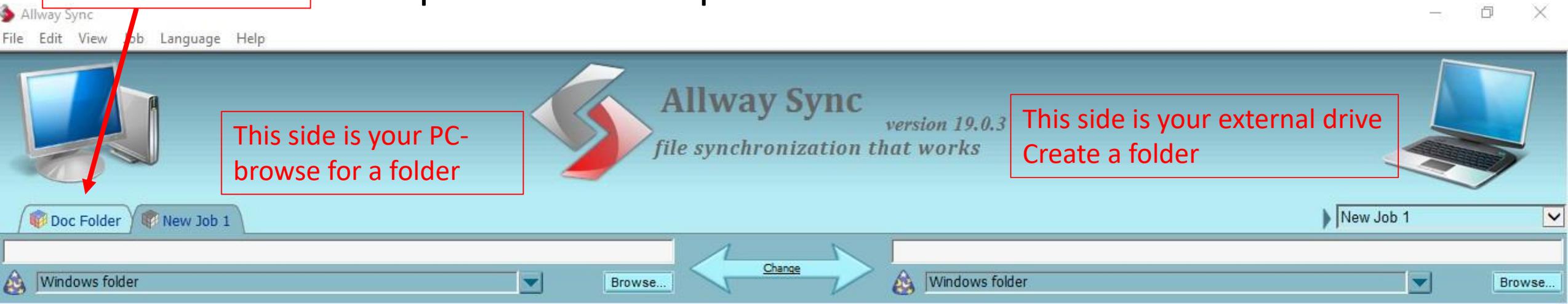Restore

Windows could not find a backup for this computer.

🛡 Select another backup to restore files from

Select create system image
Follow the instructions

Picasa Backup for photos and Videos

If you are a Picasa user and have created special albums, Slideshows or face-recognition-people lists then use Picasa Backup as these features will be lost in File History, Allway Sync or Macrium

Jobs are created for
Each type of folder
You want to back up

Always Sync only has a single version of a file :
it copes with Email pst files well.

Allway Sync

File   Edit   View   Job   Language   Help

Allway Sync
version 19.0.3
file synchronization that works

This side is your PC-
browse for a folder

This side is your external drive
Create a folder

Doc Folder   New Job 1   New Job 1

Windows folder   Browse...   ← Change →   Windows folder   Browse...

Allway Sync can be set to run automatically when ever the backup device is connected
or you can run a backup on demand.

Allway Sync analyses files to identify changes then updates those changes on the backup device

Analyze   Synchronize   Clear

Automatic synchronization is off